

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-14. (CANCELED)

15. (CURRENTLY AMENDED) A recombinant expression and cloning vector comprising a nucleotide sequence coding for the N-terminal region of a polypeptide specifically toxic toward larvae of Lepidoptera of the family Noctuidae, wherein the nucleotide sequence ~~comprises~~ consists of the sequence of an about 3 kb ~~sequence of~~ a *HindIII-PstI* DNA fragment of the δ endotoxin gene of *Bacillus thuringiensis*, wherein the *Bacillus thuringiensis* is aizawai 7-29 strain.

16. (CANCELED)

17. (CURRENTLY AMENDED) A modified bacterial strain comprising a nucleotide sequence coding for at least part of the N-terminal region of a polypeptide specifically toxic toward larvae of Lepidoptera of the family Noctuidae, wherein the nucleotide sequence ~~comprises~~ consists of the sequence of an about 3 kb ~~sequence of~~ a *HindIII-PstI* DNA fragment of the δ endotoxin gene of *Bacillus thuringiensis*, wherein the *Bacillus thuringiensis* is aizawai 7-29 strain.

18-20. (CANCELED)

21. (CURRENTLY AMENDED) A process for obtaining a nucleotide sequence coding for ~~at least a part of the N-terminal region of~~ a polypeptide toxic specifically toward Lepidoptera of the family Noctuidae, ~~wherein the nucleotide sequence is from an about 3 kb sequence of a *HindIII-PstI* DNA fragment of *Bacillus thuringiensis*, comprising:~~

(a) hybridizing a sequence of nucleotides from a strain of *B. thuringiensis* active against *S. littoralis*, and one or more hybridization probes, at 42°C in a solution containing 5xSSC, 30% formamide, and 1x Denhardt's, wherein the hybridization probes are derived from nucleotide sequences comprising:

(i) the 5' part of a restriction fragment of a gene for the δ -endotoxin of *B. thuringiensis* that codes for the N-terminal part, amino acids 1-280 of SEQ ID NO: 2, of a polypeptide toxic toward Lepidoptera, or

(ii) the 3' part of a restriction fragment of a gene for the δ -endotoxin of *B. thuringiensis* coding for the COOH part, amino acids 621-1175 of SEQ ID NO: 2, of a polypeptide toxic toward Lepidoptera,

(b) isolating at least one fragment,

(c) cloning the fragment or fragments in a vector.

22. (CURRENTLY AMENDED) The process according to Claim 21, wherein the hybridization probes utilized are obtained from a gene for δ -endotoxin derived from [[a]] aizawai 7-29 strain for a protein of 130 kDa active against *P. brassicae* and inactive toward *S. littoralis*.

23. (PREVIOUSLY PRESENTED) The process according to Claim 21 or 22, wherein the fragment in (b) is one sequence of nucleotides derived from one strain of *B. thuringiensis*.

24. (PREVIOUSLY PRESENTED) The process according to Claim 21, wherein the fragment in (b) is at least 2 sequences of nucleotides from at least 2 different strains of *B. thuringiensis* possessing the same restriction maps and containing

all or part of the sequences of nucleotides capable of coding for a polypeptide active toward *S. littoralis*.

25. (PREVIOUSLY PRESENTED) The process according to Claim 23, wherein the fragment recombined with the vector in the cloning step (c) is a *HindIII-PstI* restriction fragment from the aizawai 7-29 strain.

26. (PREVIOUSLY PRESENTED) The process according to Claim 24, wherein the fragment recombined with the vector in the cloning step (c) is a *HindIII-HincII* restriction fragment from the *entomocidus* 6-01 strain and a *HincII-PstI* restriction fragment from the aizawai 7-29 strain.

27. (PREVIOUSLY PRESENTED) The process according to Claim 22, wherein the fragments recombined in step (c) are the insert of plasmid pHTA6 and the restriction fragments *HindIII-HincII* and *HincII-PstI*, which are the respective inserts of recombinant plasmids pHTE6 and pHTA6.

28. (CANCELED)

29. (CURRENTLY AMENDED) A process for producing a polypeptide toxic towards Lepidoptera comprising:

(a) expressing the polypeptide in a microorganism capable of expressing recombinant vectors, wherein the recombinant vectors are at least one of:

(i) a recombinant expression vector comprising a nucleotide sequence coding for the N-terminal region of a polypeptide specifically toxic toward larvae of Lepidoptera of the family Noctuidae, wherein the nucleotide sequence ~~comprises~~ consists of the sequence of an about 3 kb sequence of a *HindIII-PstI* DNA fragment derived from a species of *Bacillus* *Bacillus thuringiensis* var. *aizawai* 7-29;

(ii) a recombinant expression vector comprising a nucleotide sequence coding for the N-terminal region of a polypeptide specifically toxic toward larvae of Lepidoptera of the family Noctuidae, ~~wherein the nucleotide sequence comprises an about 3 kb sequence of a HindIII-PstI DNA fragment derived from *Bacillus thuringiensis* or *Bacillus thuringiensis* var. *aizawai* 7-29,~~ and wherein said nucleotide sequence hybridizes at 42°C in a solution containing 5XSSC, 30% formamide, and 1X Denhardt's to a gene that expresses a polypeptide having the amino acid sequence of SEQ ID NO: 2 or larvicidal fragments thereof; or

(iii) a recombinant expression vector comprising a nucleotide sequence coding for the N-terminal region of a polypeptide specifically toxic toward larvae of Lepidoptera of the family Noctuidae, ~~wherein the nucleotide sequence comprises an about 3 kb sequence of a HindIII-PstI DNA fragment derived from *Bacillus thuringiensis* or *Bacillus thuringiensis* var. *aizawai* 7-29,~~ and wherein the encoded polypeptide is capable of forming an immunological complex with antibodies directed against a polypeptide having the amino acid sequence of SEQ ID NO: 2 or larvicidal fragments thereof; and

(b) collecting the expressed polypeptide.

30. (PREVIOUSLY PRESENTED) The process according to Claim 29, wherein the recombinant vectors are introduced into microorganisms living in the environment or in association with plants.

31. (PREVIOUSLY PRESENTED) The process according to Claim 29 or 30, wherein the recombinant vectors are introduced into microorganisms in combination with different δ -endotoxin genes.

32-36. (CANCELED)

37. (PREVIOUSLY PRESENTED) A recombinant expression and cloning vector according to Claim 15, wherein said nucleotide sequence hybridizes, at 42°C in a solution containing 5xSSC, 30% formamide, and 1x Denhardt's, with a gene that expresses a polypeptide having the amino acid sequence of SEQ ID NO: 2 or larvicidal fragments thereof.

38. (PREVIOUSLY PRESENTED) A recombinant expression and cloning vector according to Claim 15, wherein the encoded polypeptide is capable of forming an immunological complex with antibodies directed against a polypeptide having the amino acid sequence of SEQ ID NO: 2 or larvicidal fragments thereof.

39. (PREVIOUSLY PRESENTED) A modified bacterial strain according to Claim 17, wherein said nucleotide sequence hybridizes, at 42°C in a solution containing 5xSSC, 30% formamide, and 1x Denhardt's, with a gene that expresses a polypeptide having the amino acid sequence of SEQ ID NO: 2 or larvicidal fragments thereof.

40. (PREVIOUSLY PRESENTED) The process according to Claim 29, wherein the microorganism is selected from the group consisting of *E. coli*, *B. subtilis*, *B. cereus*, or *B. thuringiensis*.

41. (CURRENTLY AMENDED) A process for producing plants resistant to *S. littoralis* comprising

transforming a plant sensitive to *S. littoralis* with a recombinant vector of at least one of the following:

(i) a recombinant expression vector comprising a nucleotide sequence coding for the N-terminal region of a polypeptide specifically toxic toward larvae of Lepidoptera of the family Noctuidae, wherein the nucleotide sequence comprises

consists of the sequence of an about 3 kb sequence of a HindIII-PstI DNA fragment
derived from ~~a species of *Bacillus*~~ *Bacillus thuringiensis* var. *aizawai* 7-29;

(ii) a recombinant expression vector comprising a nucleotide sequence coding for the N-terminal region of a polypeptide specifically toxic toward larvae of Lepidoptera of the family Noctuidae, ~~wherein the nucleotide sequence comprises an about 3 kb sequence of a HindIII-PstI DNA fragment derived from *Bacillus thuringiensis* or *Bacillus thuringiensis* var. *aizawai* 7-29,~~ and wherein said nucleotide sequence hybridizes at 42°C in a solution comprising 5XSSC, 30% formamide and 1X Denhardt's, to a gene that expresses a polypeptide having the amino acid sequence of SEQ ID NO: 2 or larvicidal fragments thereof; or

(iii) a recombinant expression vector comprising a nucleotide sequence coding for the N-terminal region of a polypeptide specifically toxic toward larvae of Lepidoptera of the family Noctuidae, ~~wherein the nucleotide sequence comprises an about 3 kb sequence of a HindIII-PstI DNA fragment derived from *Bacillus thuringiensis* or *Bacillus thuringiensis* var. *aizawai* 7-29,~~ and wherein the encoded polypeptide is capable of forming an immunological complex with antibodies directed against a polypeptide having the amino acid sequence of SEQ ID NO: 2 or larvicidal fragments thereof,

wherein the transformed plant produces a polypeptide toxic toward *S. littoralis*.